



CONTRIBUTION OF SURGICAL AND PARA SURGICAL PROCEDURES IN AYURVEDA IN NEUROLOGICAL DISORDERS, EFFICACY OF CUPPING THERAPY IN LUMBAR RADICULOPATHY.

NAME OF THE PRESENTER

DR. SAURABH KALIDAS DORLIKAR

DESIGNATION:

P.G. SCHOLAR (SHALYATANTRA)

INSTITUTE NAME AND ADDRESS:

YMT AYURVEDIC MEDICAL COLLEGE & HOSPITAL, SECTOR 4, KHARGHAR, NAVI MUMBAI

Abstract:

Lumbar radiculopathy, a group of diseases in which the dorsal root ganglia or dorsal roots are adversely affected by herniated discs or spinal stenosis, are clinically characterized by spontaneous and evoked types of pain. It is becoming a major health problem now a days. This may be due to adopting faulty posture and living habits. Since conventional treatment for lumbar radiculopathy have limited evidence, patients often request complementary therapies. Cupping therapy appears to be beneficial in treating lumbar radiculopathy. It is an ancient method which is a type of physical therapy which improves the subcutaneous blood flow, stimulates the autonomous nervous system and reduces the pain. A diagnosed case of lumbar radiculopathy is presented here which was treated successfully with cupping therapy. Purpose of review the goal of this paper is to outline an effectiveness of cupping therapy in lumbar radiculopathy.

Introduction:

Lumbosacral radiculopathy is a disorder that causes pain in the lower back and hip which radiates down the back of the thigh into the leg. This damage is caused by compression of the nerve roots which exit the spine, levels L1- S4. The compression can result in tingling, radiating pain, numbness, paresthesia, and occasional shooting pain. Radiculopathy can occur in any part of the spine, but it is most common in the lower back (lumbar-sacral radiculopathy).^[1]

Prevalence of this disease is much common. Para spinal muscle spasm is experienced in 60% to 80% of adults at some point of their lifetime. At least 50% of adults would have experienced para spinal muscle spasm associated with low back pain once in a lifetime.^[2]

Radiculopathy is not the same as “radicular pain” or “nerve root pain”. Radiculopathy and radicular pain commonly occur together, but radiculopathy can occur in the absence of pain and radicular pain can occur in the absence of radiculopathy. Radiculopathy can be defined as the whole complex of symptoms that can arise from nerve root pathology, including anesthesia, paresthesia, hypoesthesia, motor loss and pain.^[3]

Radicular pain and nerve root pain can be defined as a single symptom (pain) that can arise from one or more spinal nerve roots. Lumbar sacral radiculopathy is a disorder of the spinal nerve roots from L1 to S4.

Cupping therapy works on the same principle of extraction of blood by creating vacuum. cupping therapy targets soft tissue by applying local pressure to pain points and areas of tenderness. It is thought to act mainly by increasing local blood circulations and releasing the painful muscle tension.^[4]

Reports indicated that cupping therapy has frequently used to relieve back pain and also it helps to release harmful toxins by stimulating lymphatic system and clearing the blood vessels.

Cupping therapy been practiced for thousands of years. The health Organization WHO definition of cupping is a therapeutic method (code 5.3.2) involving the application of suction by creating a vacuum on the dermis of the affected part of the body.^[5]

Method / Treatment Details and Schedule

- Patient was treated with cupping therapy

Pre procedure:

- Written inform consent was taken.
- Patient was given a prone position.
- Then the lower back region was painted with Betadine solution.
- Draping was done with sterile cut sheet.

Procedure:

Pricking on the skin was done with the help of needle on painful area. Cups was be applied on lower back region.

- Around one on each side was applied according to tenderness and pain and the suction of the blood was done using suction pump.
- The observations were done for proper oozing of blood in the respective at lumbar region for 10 -15 minutes.
- Then cupping was removed and coagulated blood was wiped off with sterile gauze piece.

Post procedure:

- The Lumbar region was made clean with the help of betadine solution again.
- Patient's Vitals was monitored.
- Bandage was applied at the site of cupping.
- Patient was observed for 15 minutes.
- Patient was examining thoroughly with the points mentioned in assessment criteria.

OPERATIONAL DEFINITIONS

Schober's test: ^[6,7]

This test is classically used to determine if there is a decrease in lumbar spine Range of motion.

1. Patient is standing,
2. Examiner marks both posterior superior iliac spines i.e., PSIS and then draws a horizontal line at the center of both marks.
3. A second line is marked 5 cm below the first line.
4. A third line is marked 10 cm above the first line.
5. Patient is then instructed to flex forward as if attempting to touch his/her toes, examiner re-measures the distance between first line and bottom line.

SLRT: ^[8]

SLR Test done during a physical examination of PID cases to determine whether a patient with low back pain has any underlying disc herniation.

Objective criteria

1. X ray LS spine in flexion position
2. Schober's test
3. SLRT
4. Pain

	Grade 0	Grade 1	Grade 2	Grade 3
Schober's test	20 cm and Above	18 cm-19cm	18 cm-17 cm	16cm-15 cm
X ray LS spine	45°-60°	61-70°	71-80°	81-90°
SLRT	≥70°	51-70°	31-50°	≤30
Pain	No Pain	Mild Pain with slight restricted movements	Moderate pain with considerable restricted movements	Not able to carried out his/her daily activities.

Appropriate Study Instruments:

1. Patient
2. Case record form
3. Cupping kit for raktamokshna
4. Suction pump
5. Spirit
6. Needle/surgical blade
7. Gauze
8. Bandage material
9. Surgical glove
10. Measuring tape
10. Betadine solution.

Case report presenting concern:

A 51 years old male patient (MRD no.198027) came in the opd with complaints of lower backpain, restricted movements and pain referring to right leg from 1-2 months.

Clinical findings

On examination in supine position

SLRT at right leg was positive at 50 degrees. Schober's test was positive and it was grade 2. There was tenderness at right hip joint.

Case conception and selection of cupping therapy

Patient had already taken NSAIDS but did not get relief by the treatment. Hence, he approached Ayurvedic hospital and he has faith in Ayurvedic procedures. He has chosen Ayurvedic intervention for his condition. Patient underwent cupping therapy over a period of 15 days and his pain relieved and other parameters improved over a period of time.

Result

Changes in SLRT, Schober's test and grade of pain were included as the outcome measure before and after treatment. A significant improvement was observed in all parameters. No adverse effect was reported pertaining cupping therapy.

Assessment of lumbar radiculopathy based on below mentioned parameters

	PRE-PROCEDURE	POST PROCEDURE	1 st follow up	2 nd follow up
Pain	Grade 2	Grade 1	Grade 0	Grade 0
Schober's test	18 cm-17cm	18-19 cm	20 cm normal	20 cm
SLRT	31-50 degree (grade 2)	51-70 degree (grade 1)	80 degrees	80 degrees
Xray LS spine Lumbar flexion position		

Conclusion

In view of above it can be concluded that present study provided scientific evidence for utilizing potential of cupping therapy in Lumbar Radiculopathy.

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